

FIG. 1

FIG. 2A-1

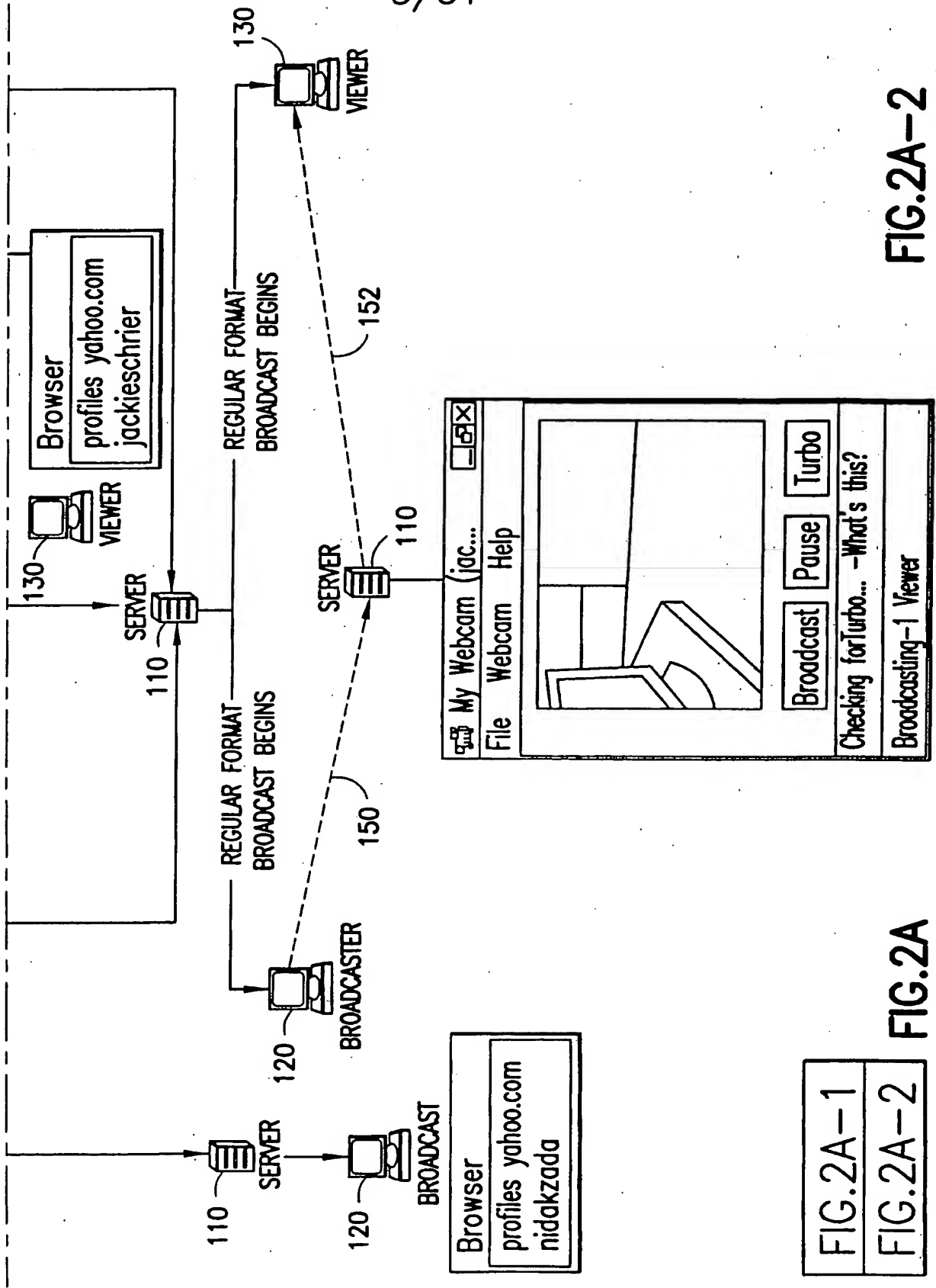


FIG.2A-2

FIG.2A

FIG.2A-1
FIG.2A-2

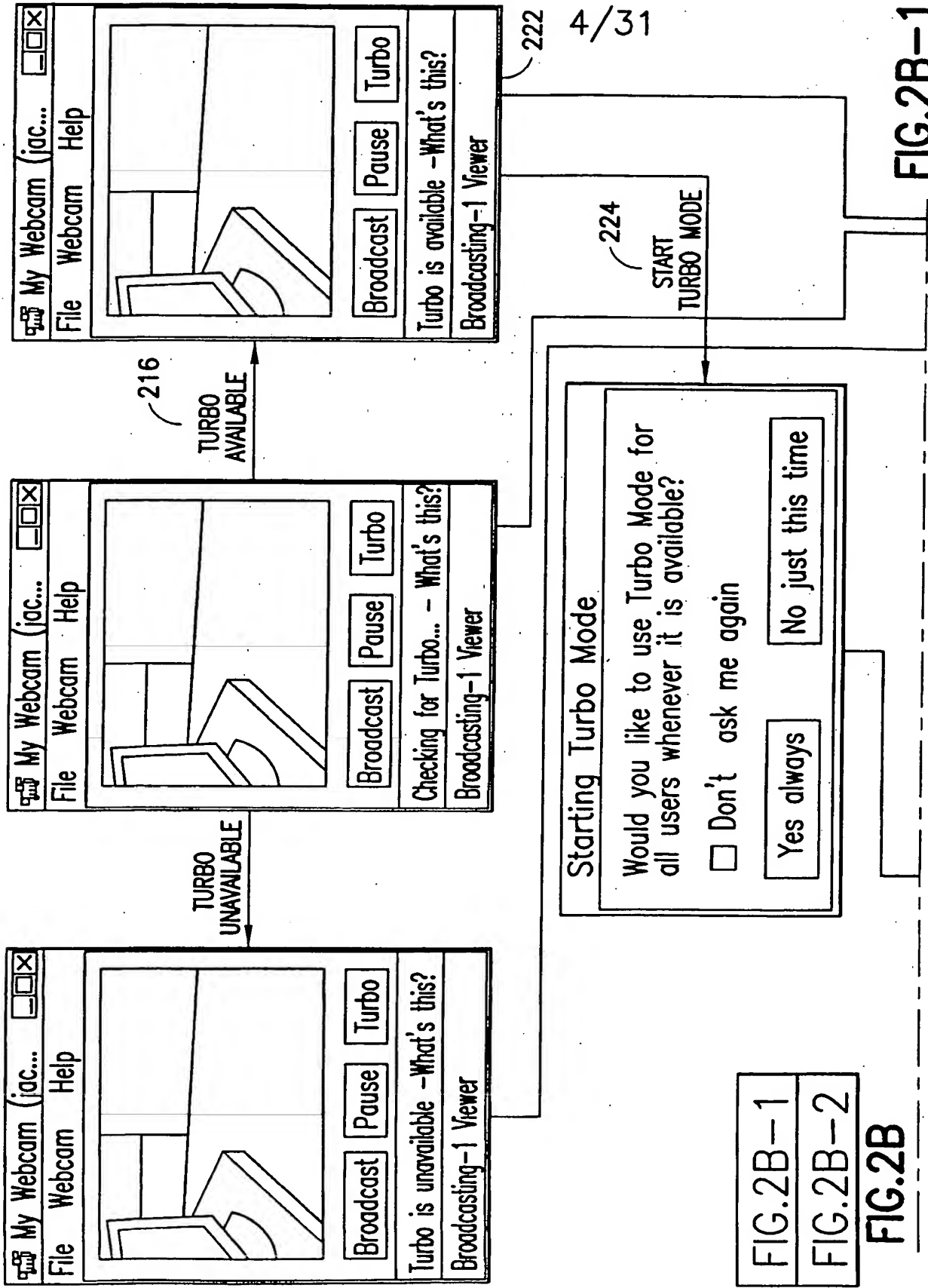


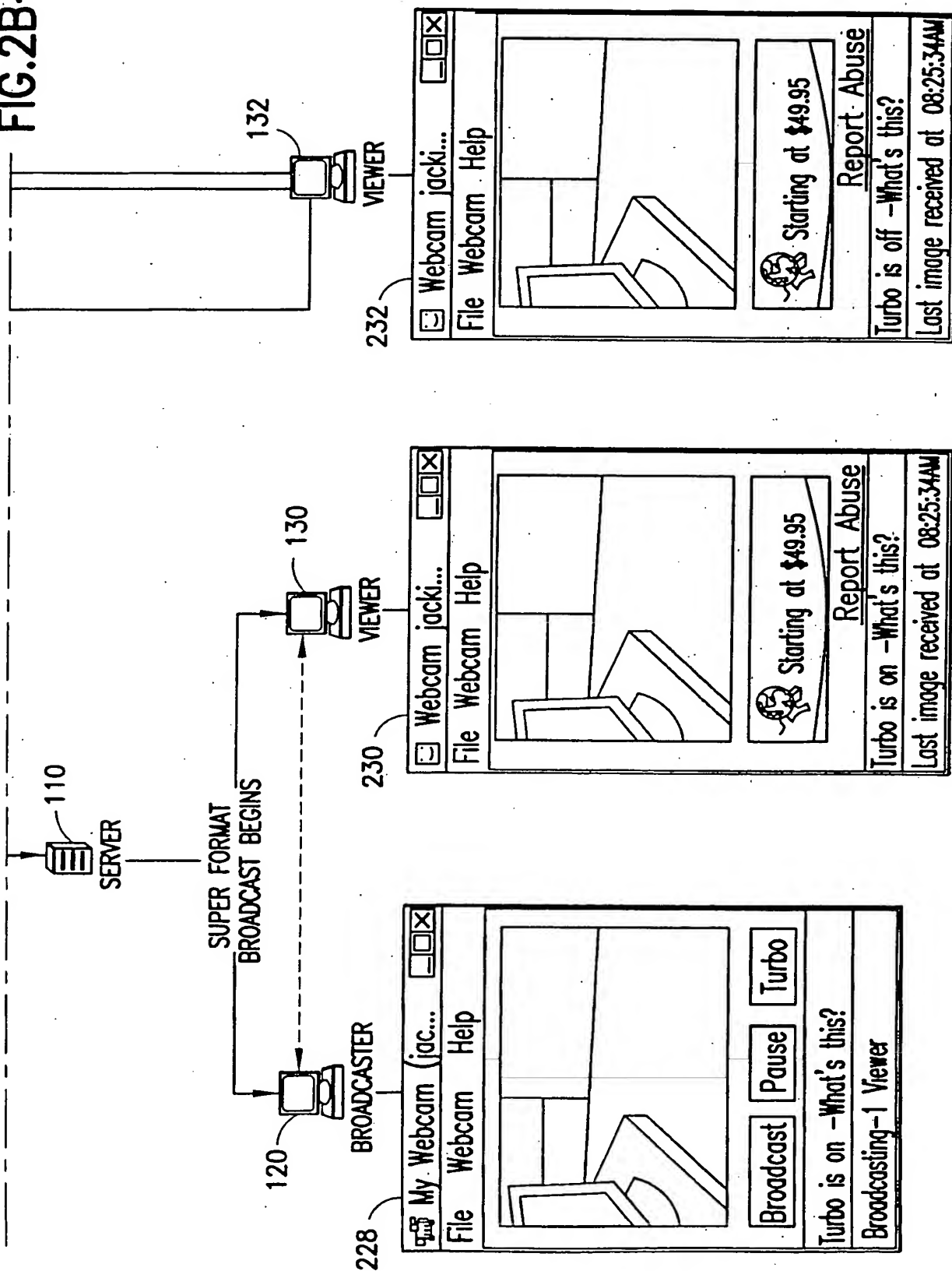
FIG.2B-1
FIG.2B-2

FIG.2B

FIG.2B-1

FIG.2B-2

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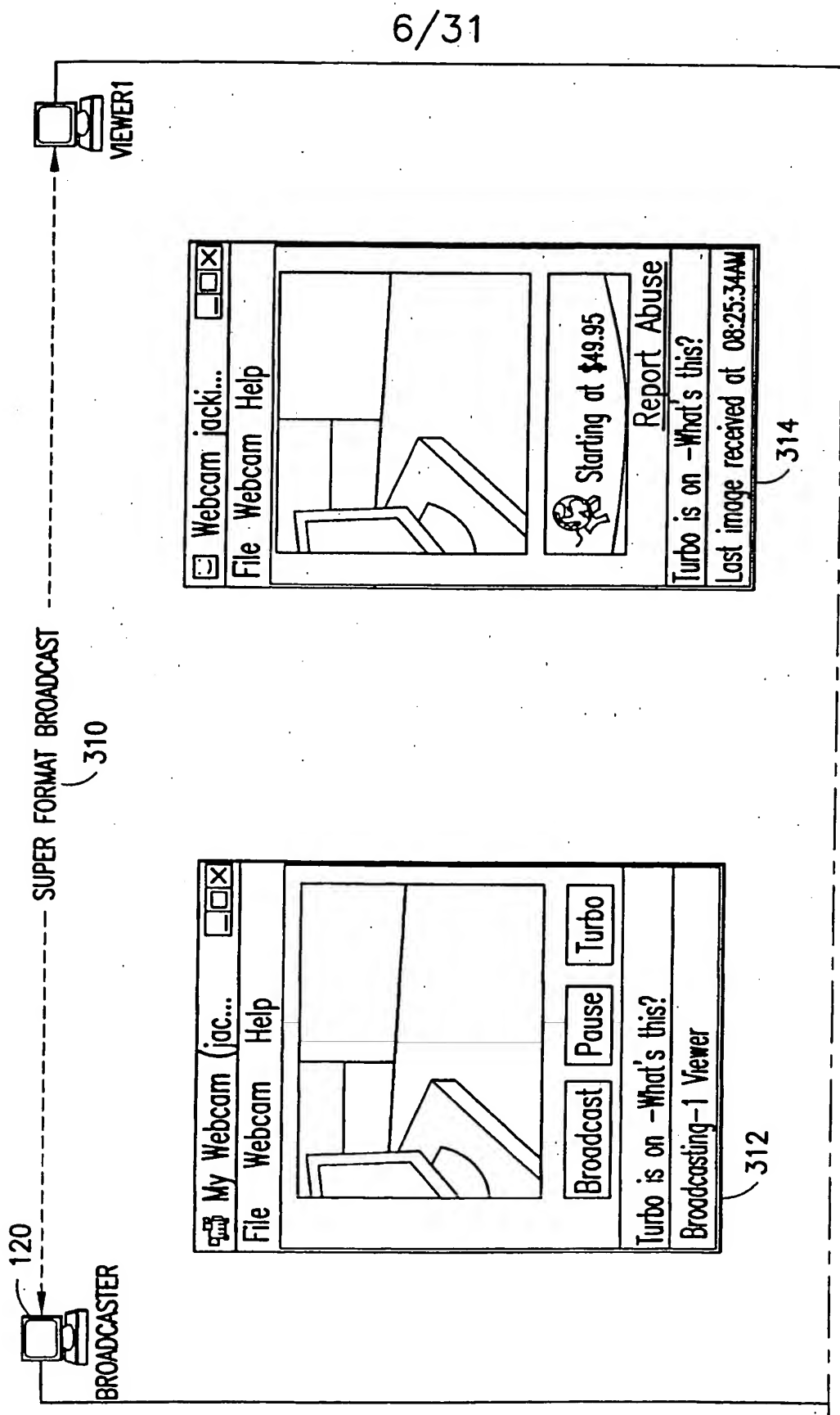


FIG.3A-1

FIG.3A-1
FIG.3B-2

FIG.3A

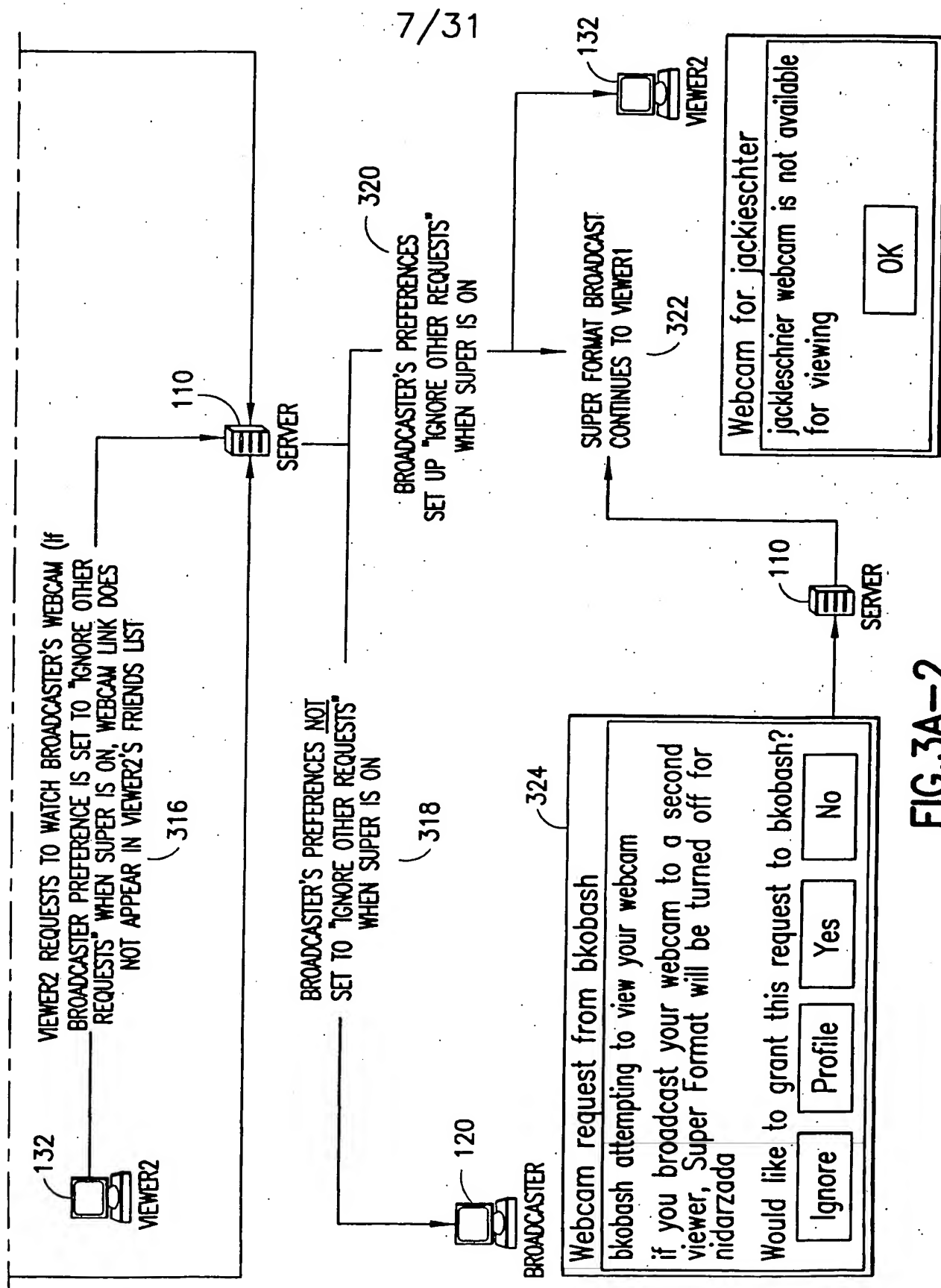


FIG.3A--2

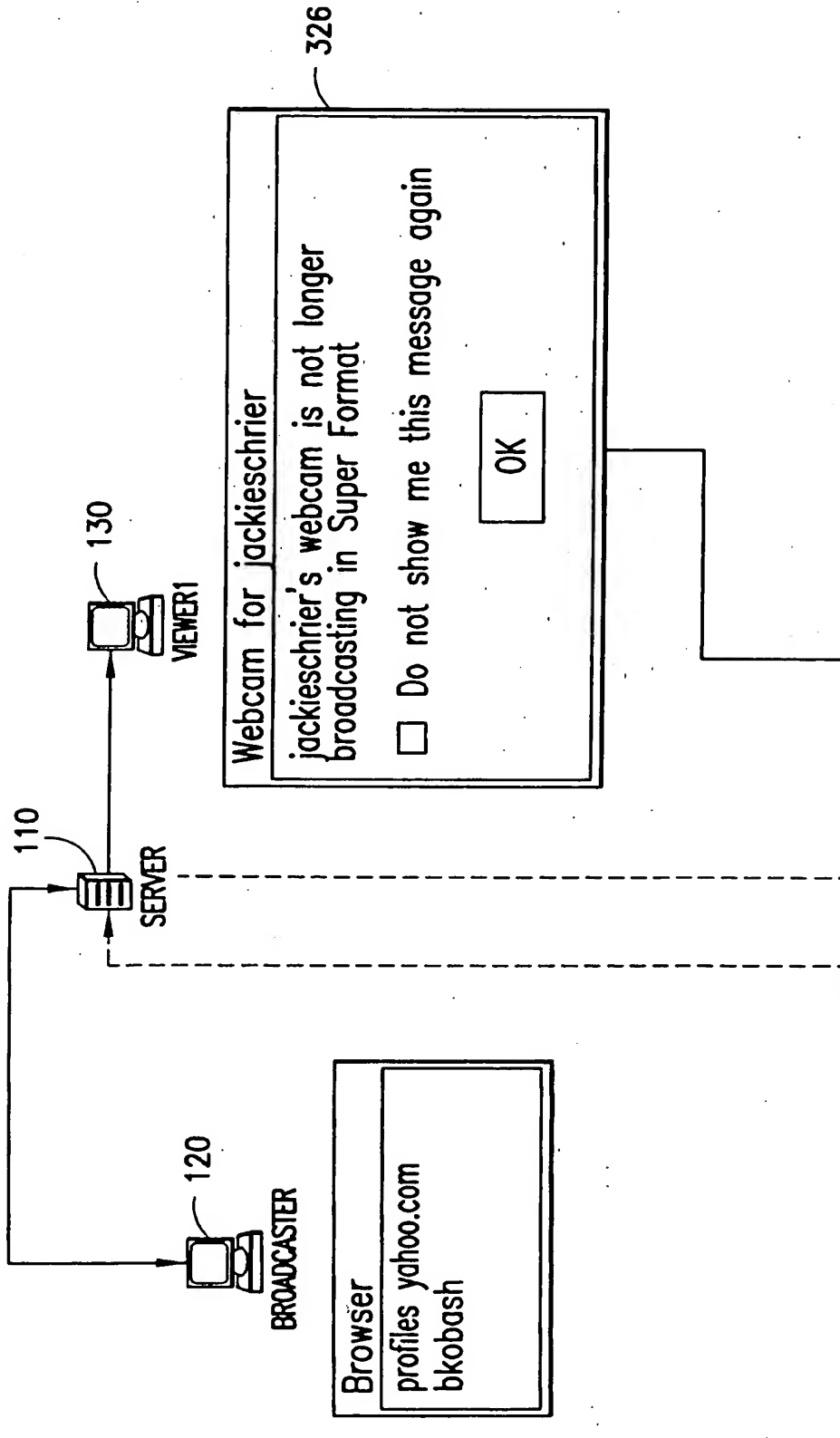


FIG.3B-1

FIG.3B-1
FIG.3B-2

FIG.3B

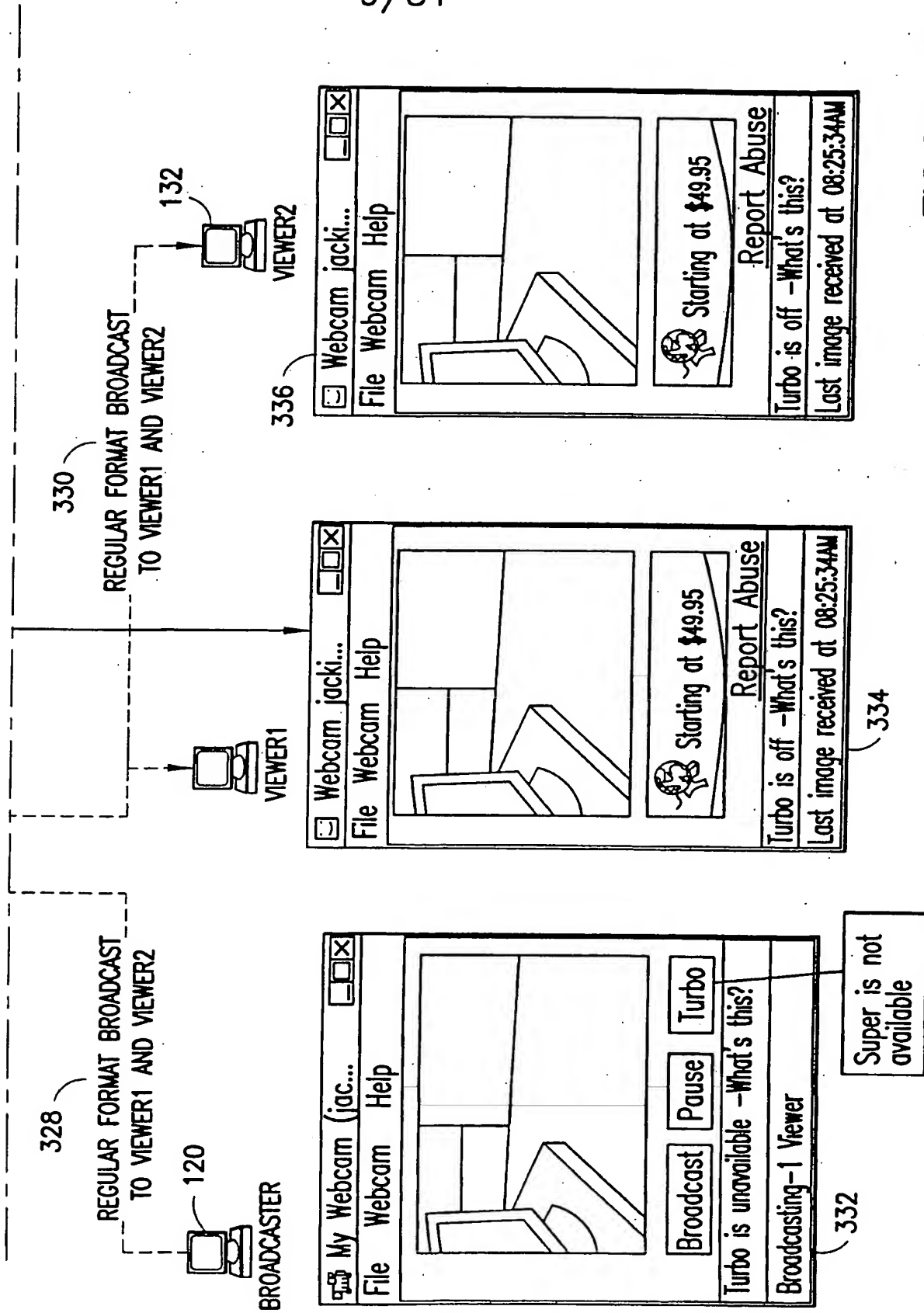


FIG.3B-2

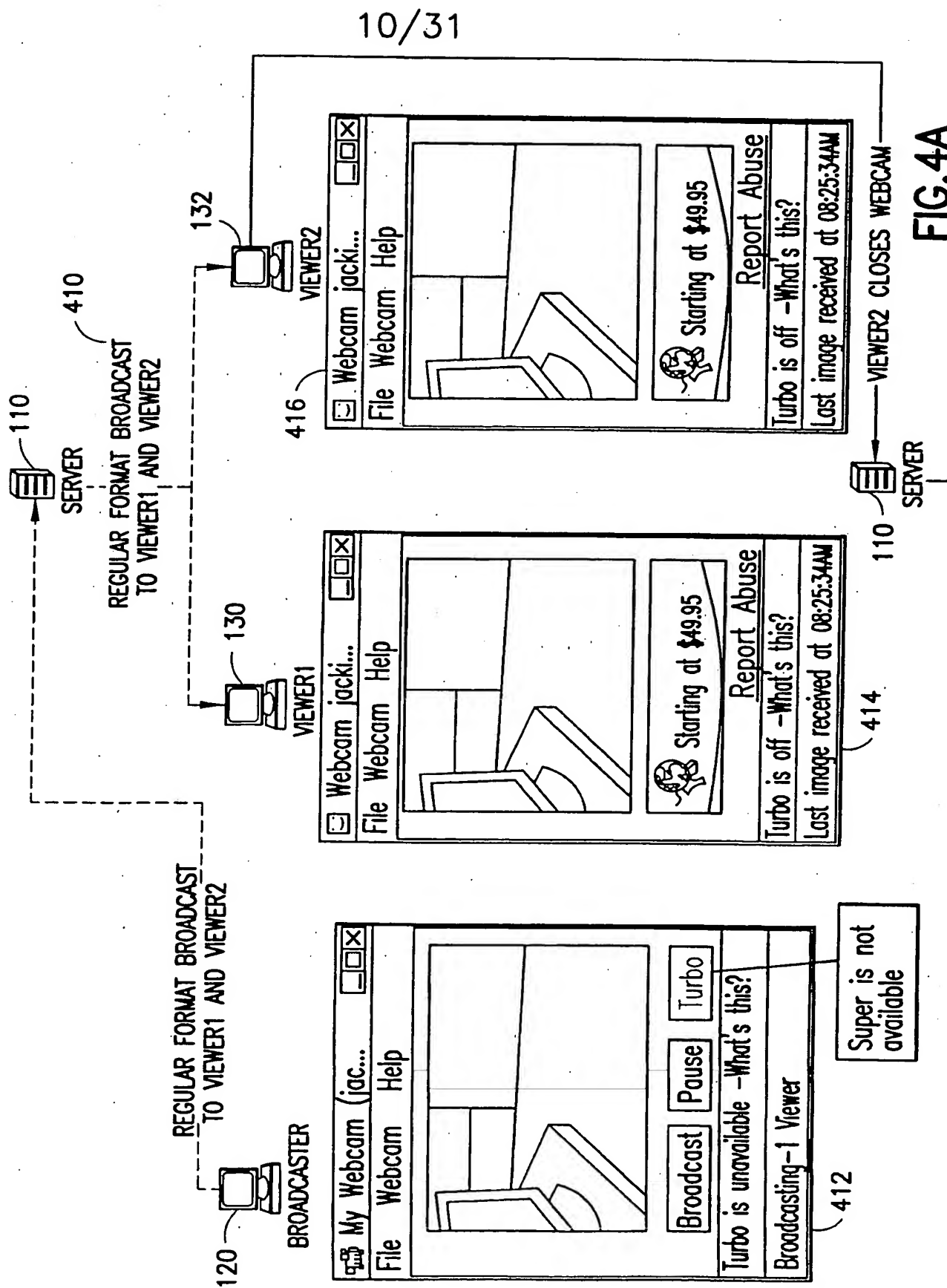


FIG. 4A

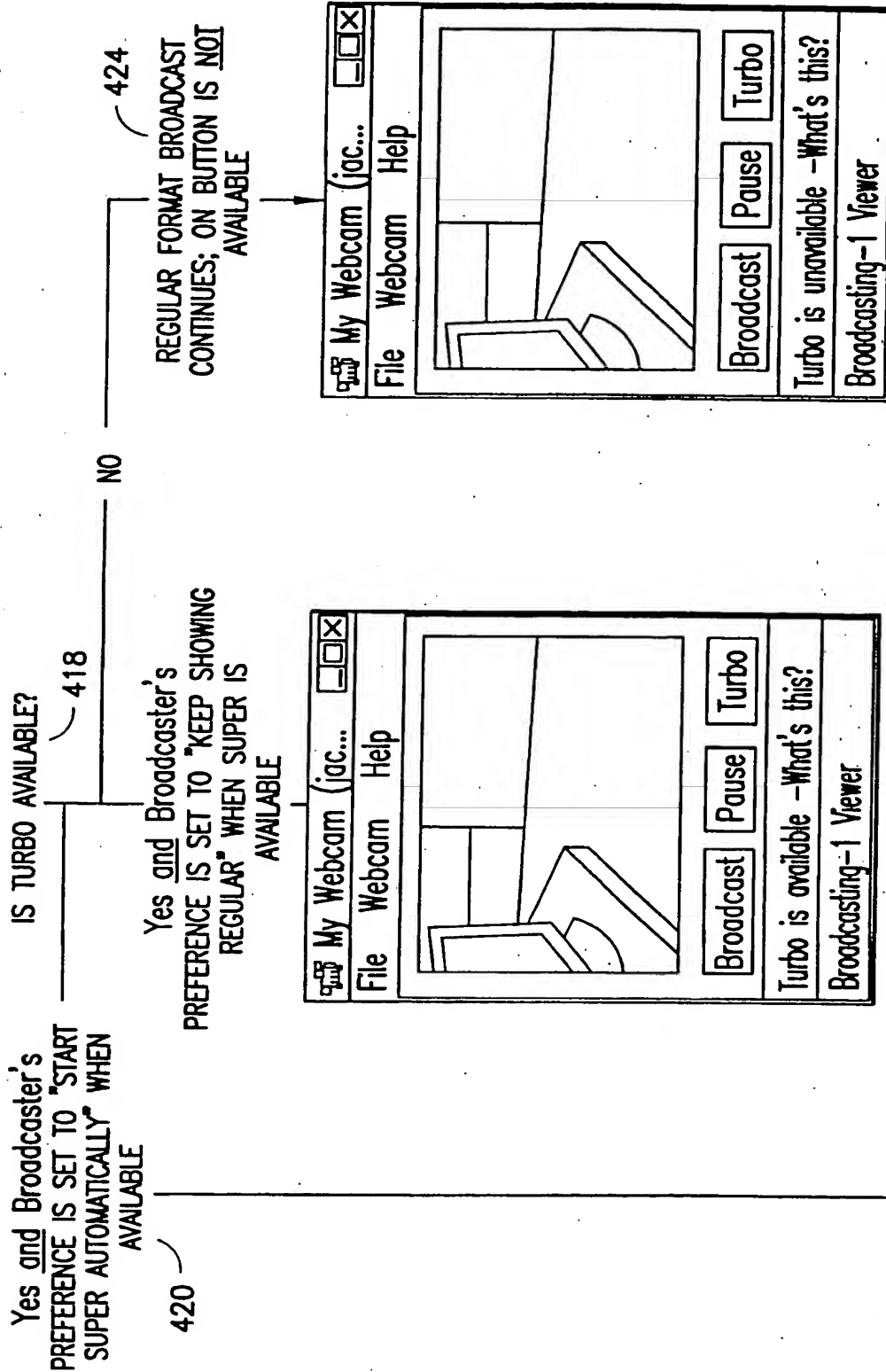


FIG.4B-1

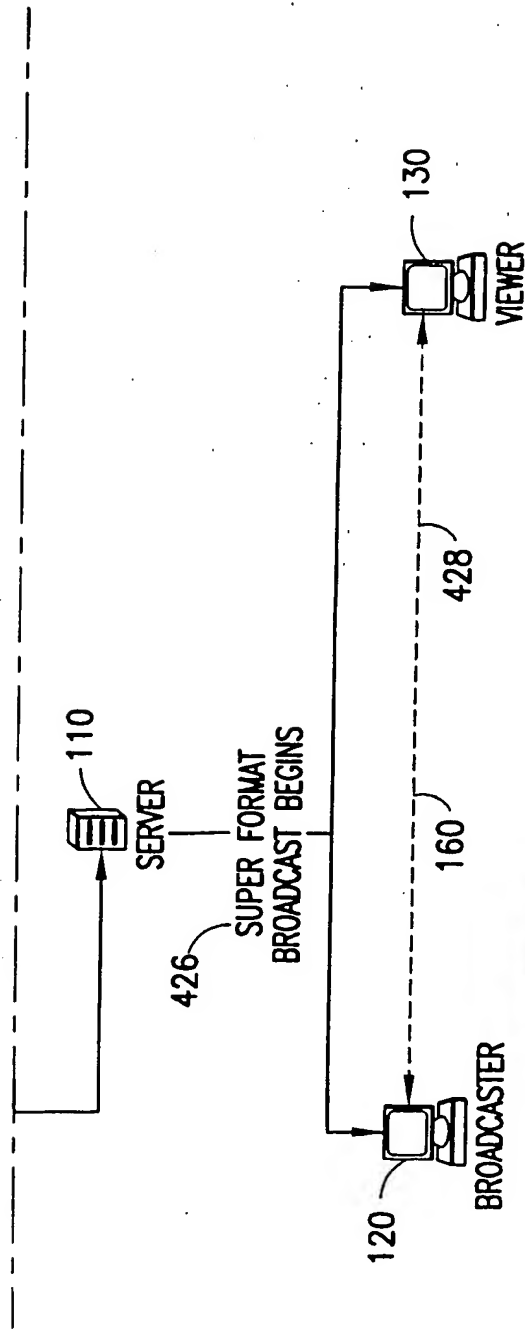


FIG. 4B-1
FIG. 4B-2

FIG. 4B

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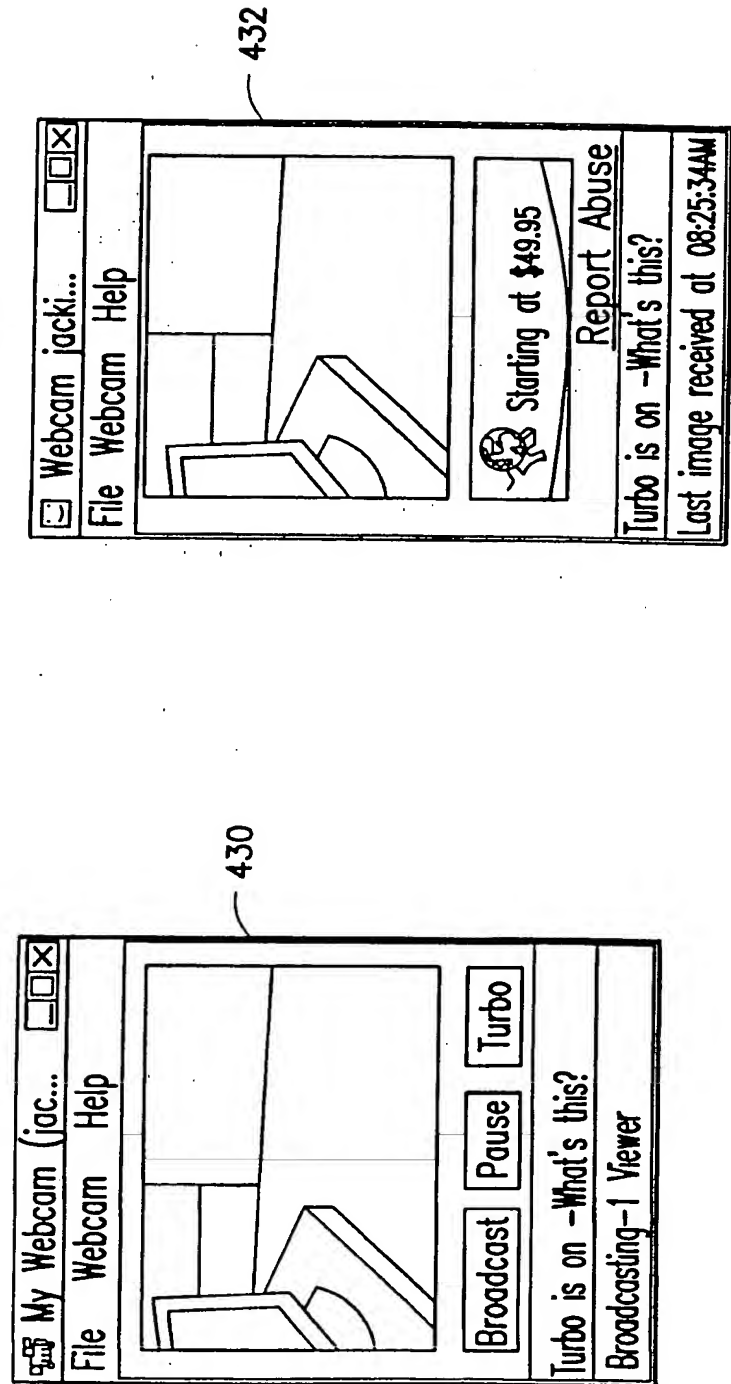


FIG. 4B-2

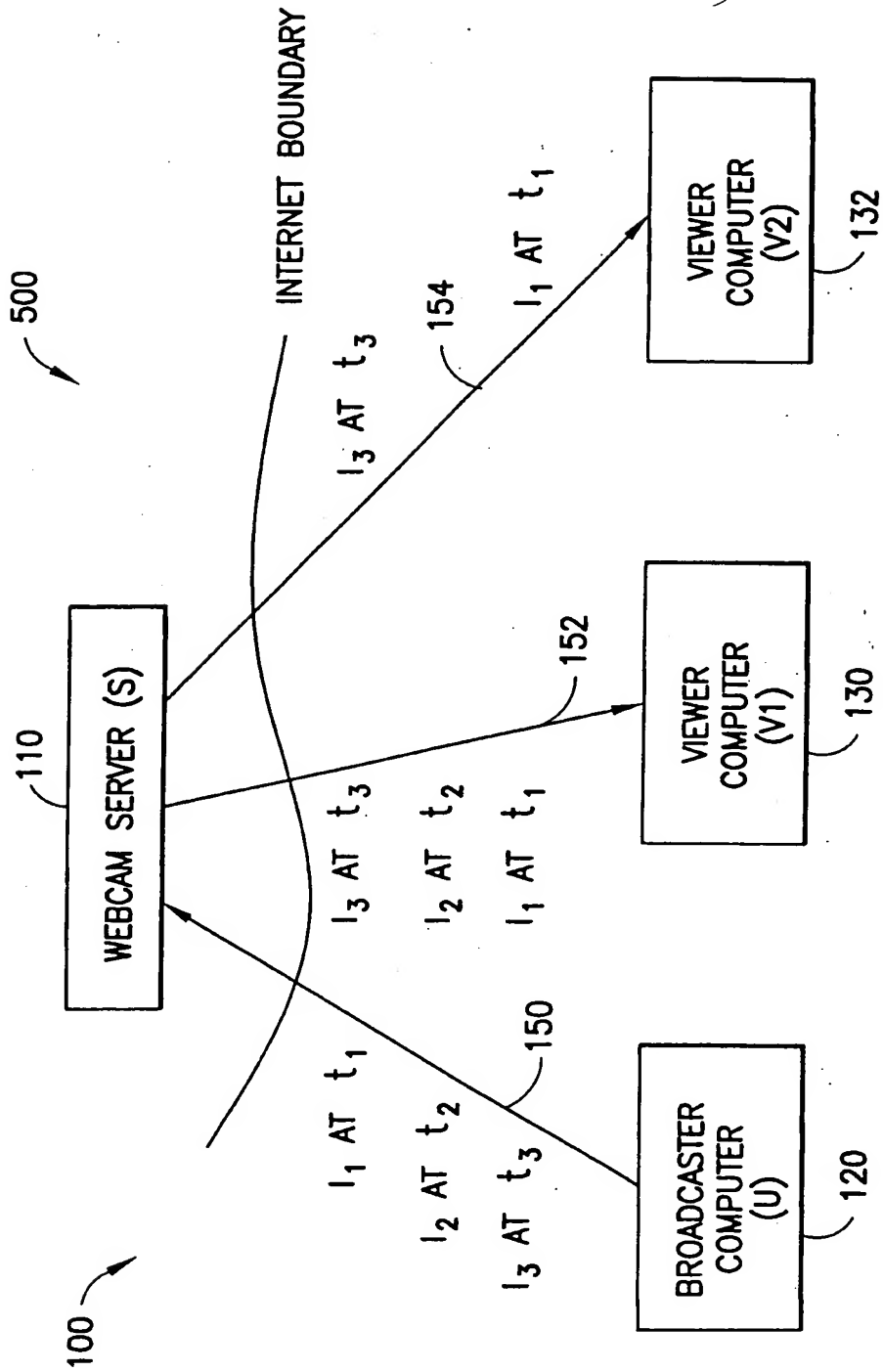


FIG.5

600

610	t_1	t_2	t_3	t_4	t_5	t_6	t_7	t_8	t_9	t_{10}
612	l_1	l_2	l_3	l_4	l_5	l_6	l_7	l_8	l_9	l_{10}

$$\text{BANDWIDTH} = \text{SUM}(l_1 + l_2 + \dots + l_{10}) / (t_{10} - t_1)$$

FIG. 6

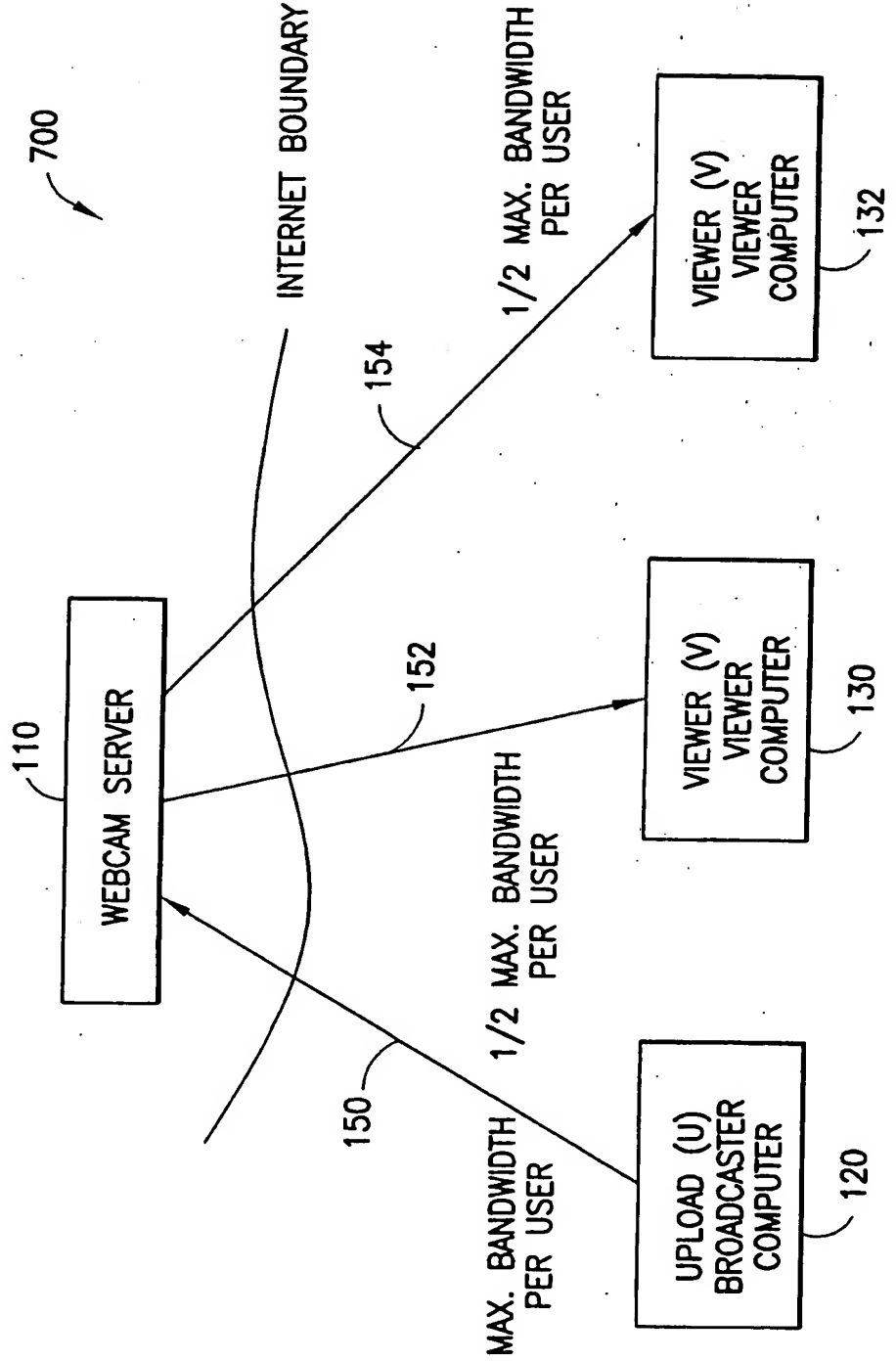


FIG. 7

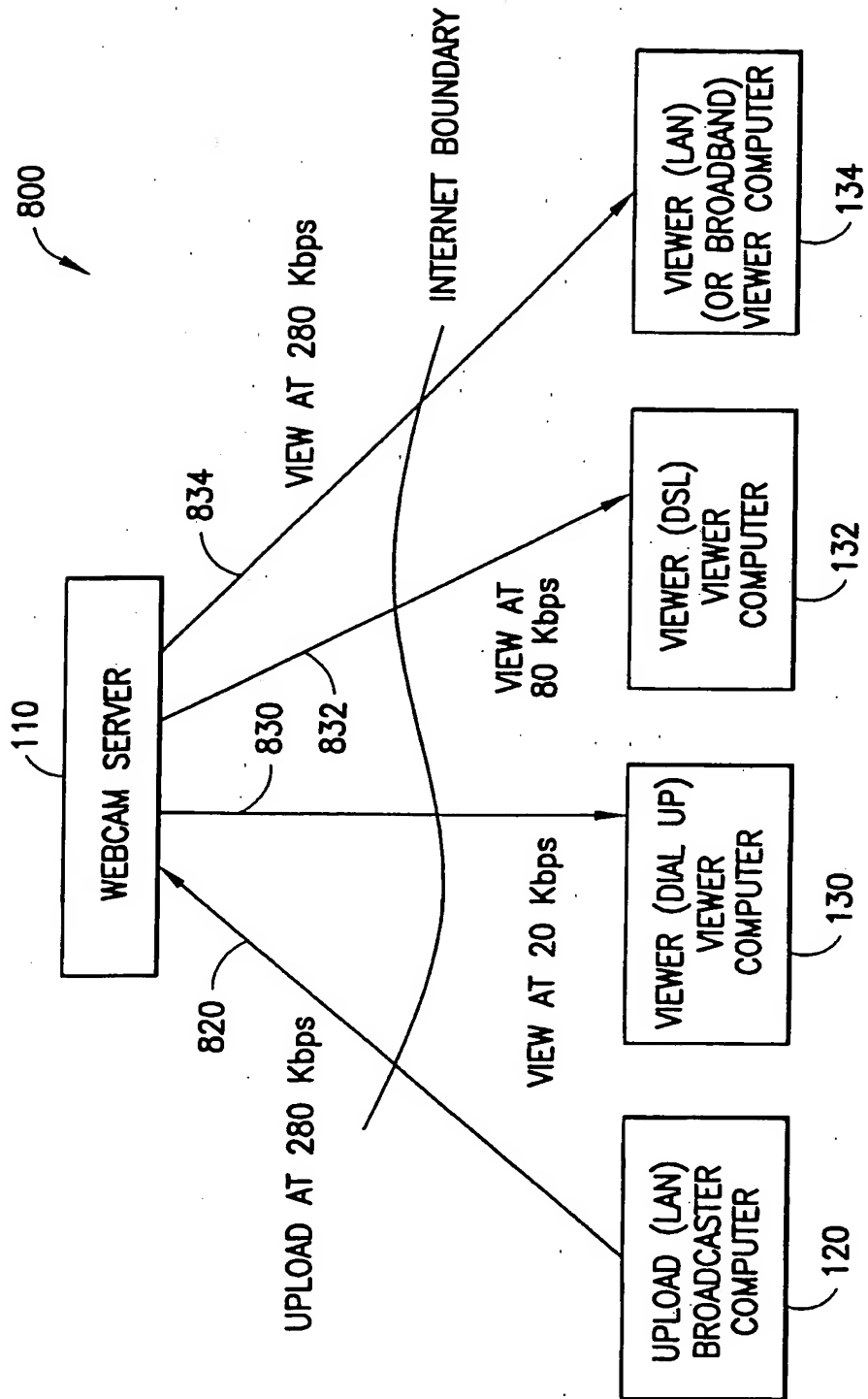


FIG.8

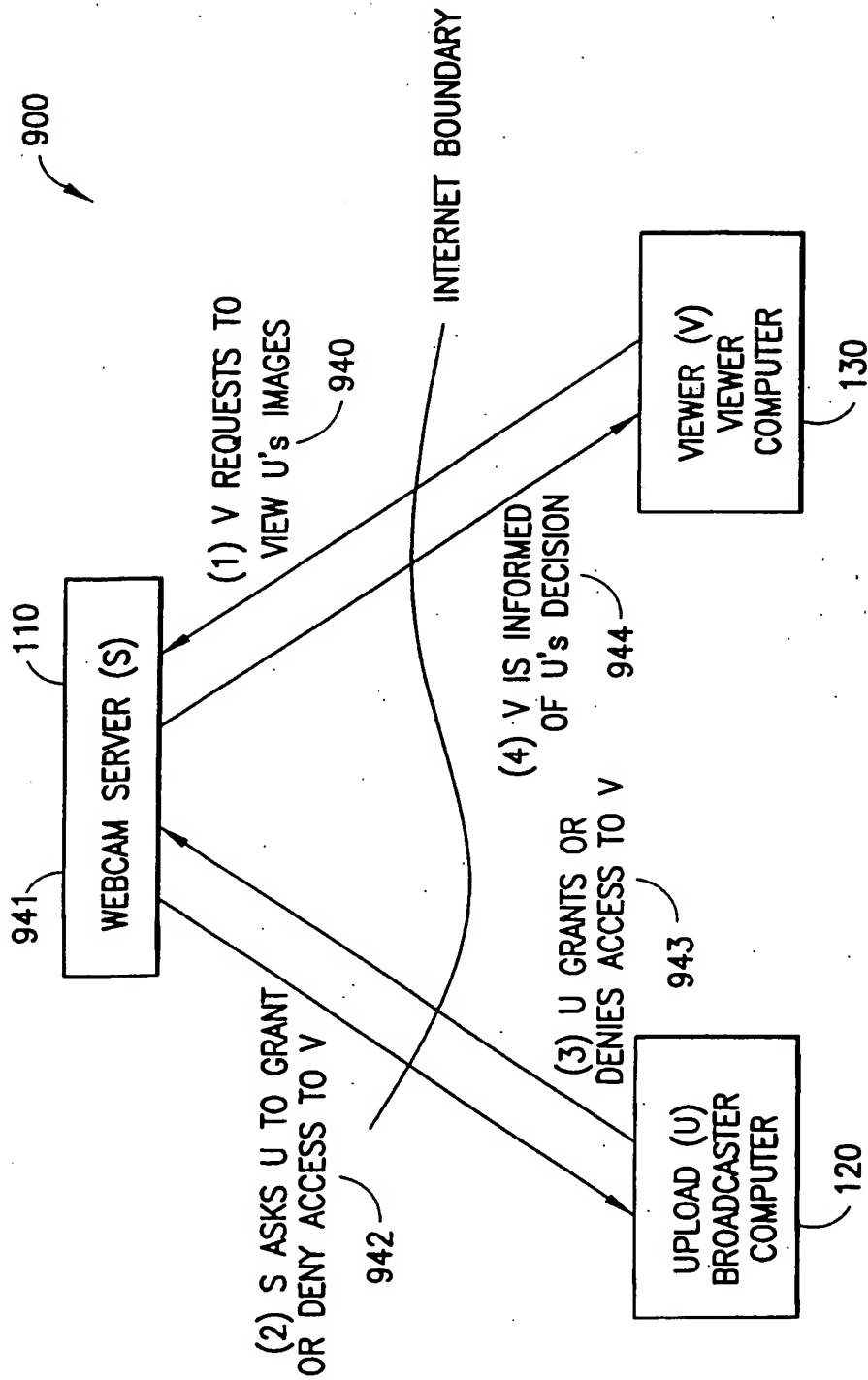


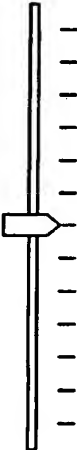
FIG.9

Category

- General
- Content
- Appearance
- Messages
- IMvironments
- File Transfer
- Alerts and Sounds
- Chat
- Webcam**
- Privacy
- Connection

Webcam

Image quality _____



Better quality

Faster refresh Camera Settings Camera Source

My images can be viewed by _____

- ☐ Always ask my permission for someone to view my Webcam
- ☐ Allow everyone to view my Webcam
- ☒ Always allow the following users to view my Webcam

Jane Doe John Doe	Edit
----------------------	----------------------

☐ Ignore other view requests

☐ If I am in a chat room, allow people in the chat room to view my Webcam

☒ Change my status message to let my friends know when my Webcam is on to _____

[View My Webcam](#)

[OK](#) [Cancel](#) [Apply](#) [Help](#)

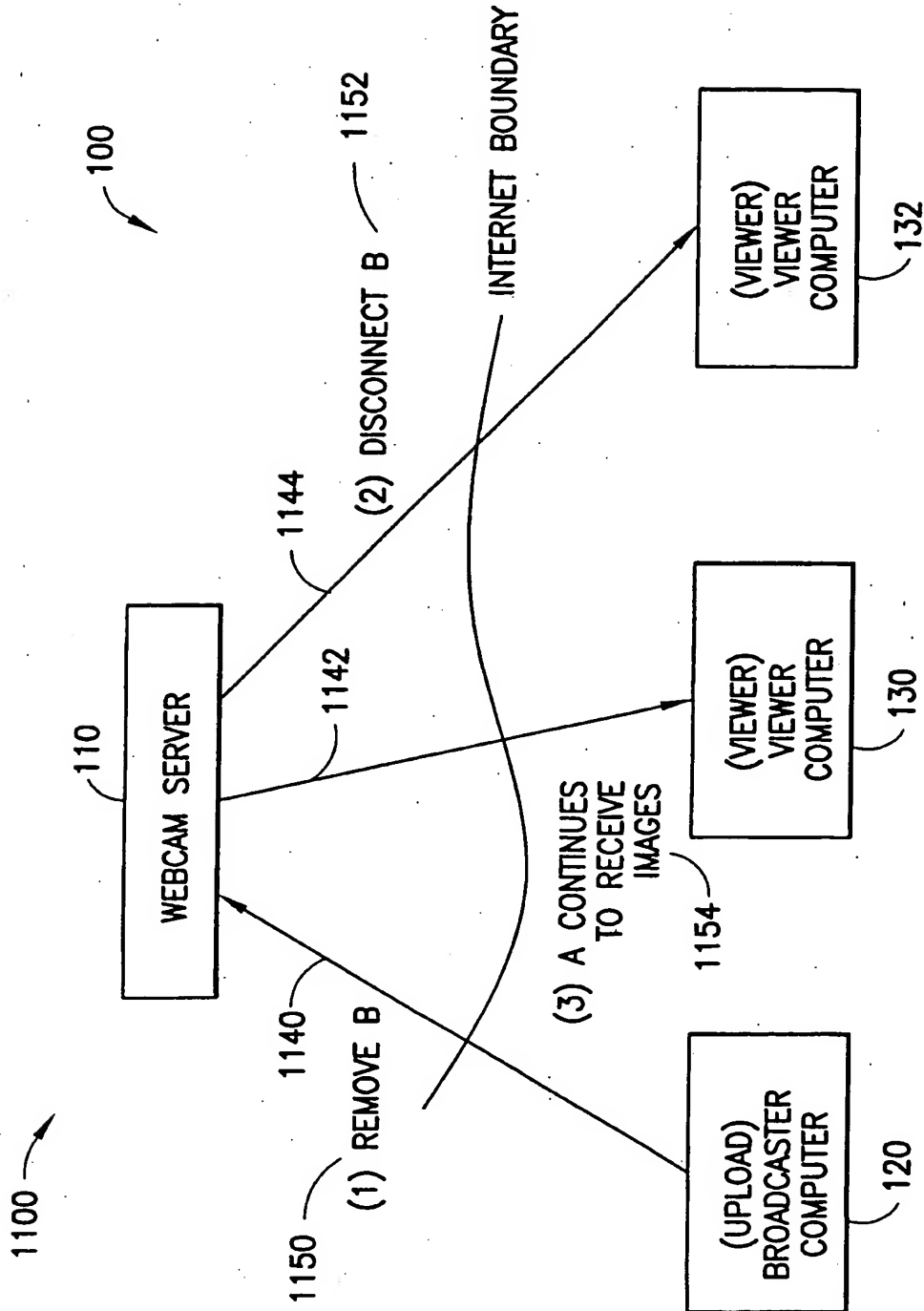


FIG.11

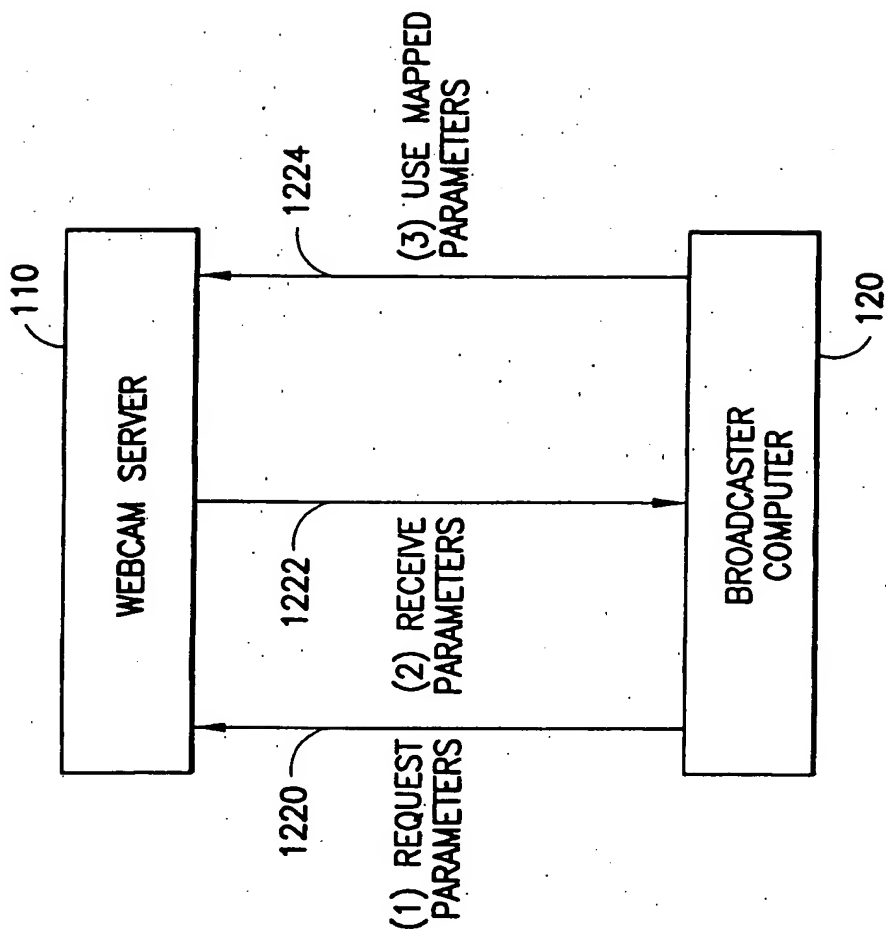


FIG.12

UNIVERSAL DATABASE

USER ID	
USER PASSWORD	
USER NAME	
MAIL PREFERENCE 1	
APPLICATION PREFERENCE 1	
ADDRESS BOOK ENTRY 1	
.	
.	
.	

1310

MASTER SESSION TABLE (ON MASTER SERVER)

SESSION 1	USER1 ID	IP	ADDR 1	LAST UPDATE 1
SESSION 2	USER2 ID	IP	ADDR 2	LAST UPDATE 2
SESSION 3	USER3 ID	IP	ADDR 3	LAST UPDATE 3
SESSION 4	USER4 ID	IP	ADDR 4	LAST UPDATE 4
.				
.				
.				

1320

CONTROL AND MONITORING TABLE

VIEWER PAUSE STATUS	UPLOADER PAUSE STATUS
VIEWER START STATUS	
VIEWER LEAVE STATUS	
VIEWER COUNT	
PEER-TO-PEER INITIATE STATUS	
THROW VIEWER	
PING VIEWER	
.	
.	
.	

1330

MASTER VIEWER SESSION TABLE

VIEWER1	UPLOADER1 (SLAVE IP OF UPLOADER1)	UPLOADER2 (SLAVE IP OF UPLOADER2)
VIEWER2	UPLOADER1 (SLAVE IP OF UPLOADER1)	
.		
.		
.		

1340

FIG.13A

SLAVE SESSION TABLE

VIEWER1	CONNECTION SPEED	VIEWER1 NAME	VIEWER1 ROOM NAME	VIEWER1 IP ADDRESS
VIEWER2	CONNECTION SPEED	VIEWER2 NAME	VIEWER2 ROOM NAME	VIEWER2 IP ADDRESS
:	:	:	:	:
:	:	:	:	:
:	:	:	:	:

1350

CONFIGURATION FILE

IMAGE QUALITY	:
IMAGE SIZE	:
:	:
:	:
:	:

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FIG.13B

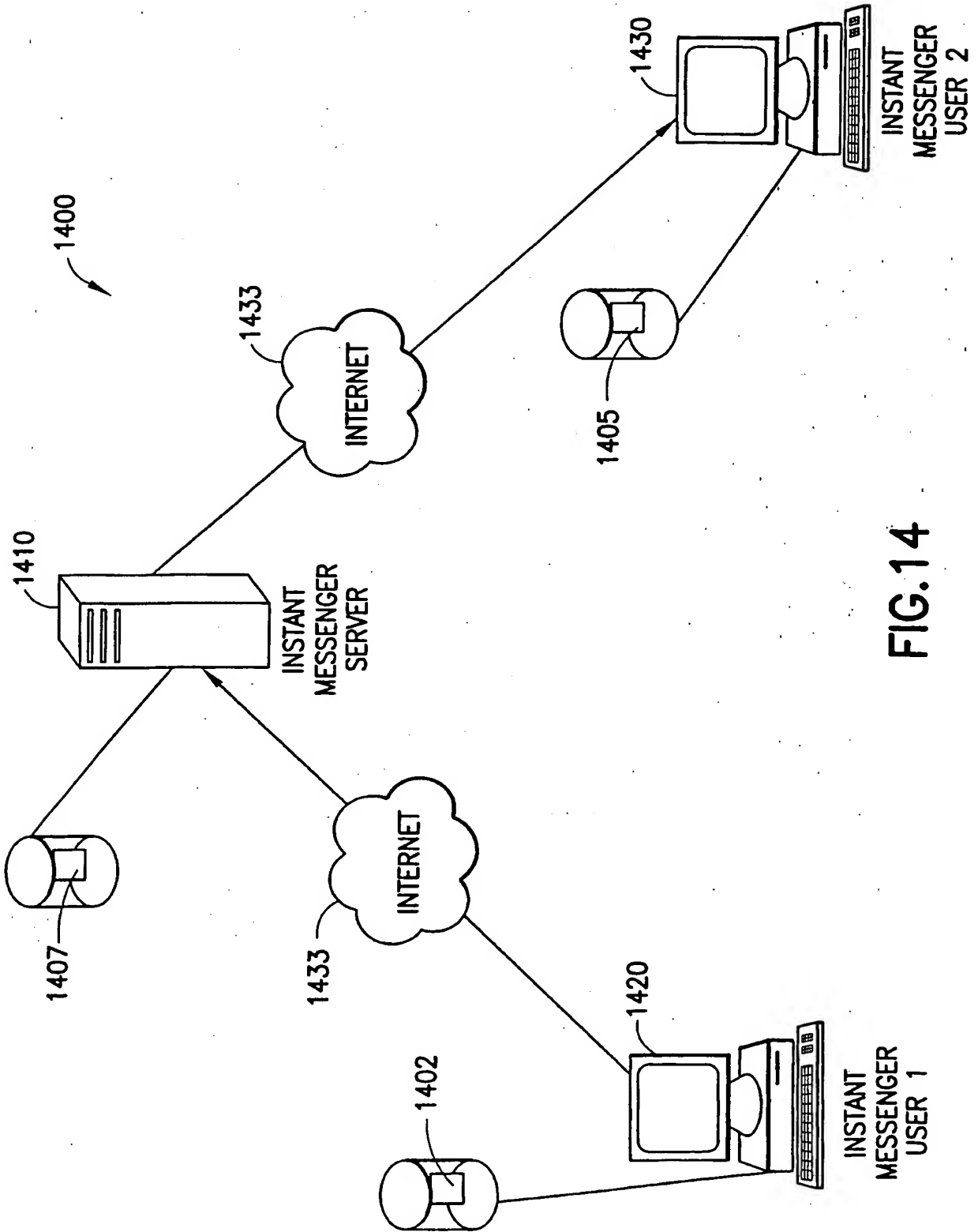


FIG.14

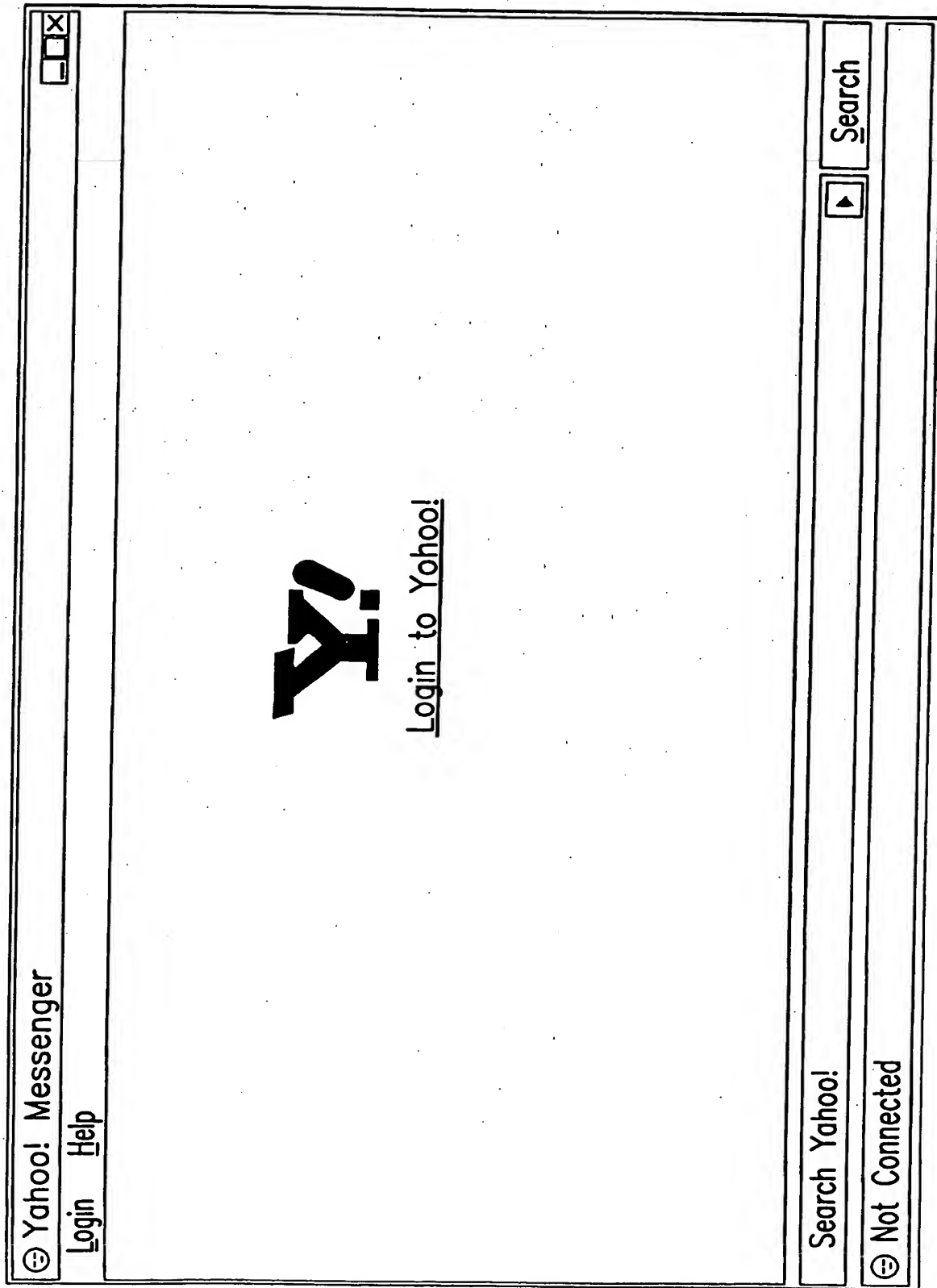


FIG.15

1500 ↗

1600

Login [X]

New user? —

Get a Yahoo! ID

— Already have a Yahoo! ID? —

Yahoo! ID

Password

☐ Remember my ID & Password

☒ Automatically Login

☐ Login under Invisible Mode

Login Cancel Help

FIG.16

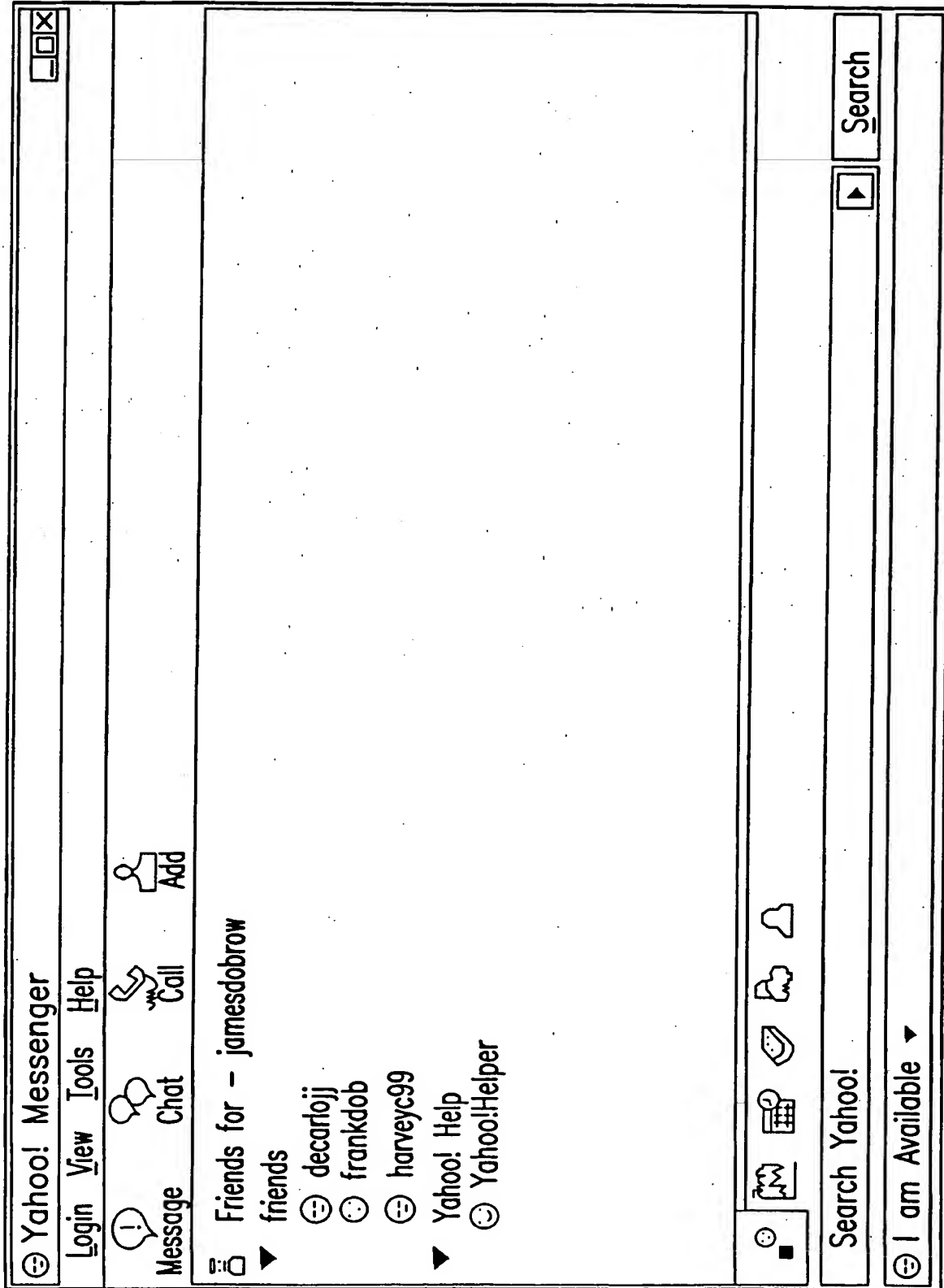


FIG.17

1800

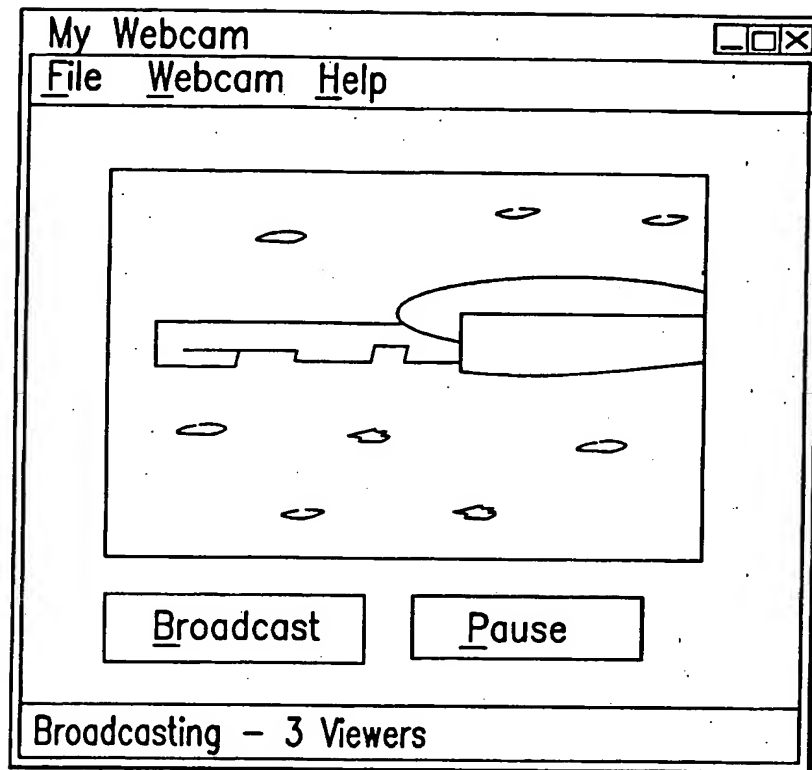


FIG.18

2100

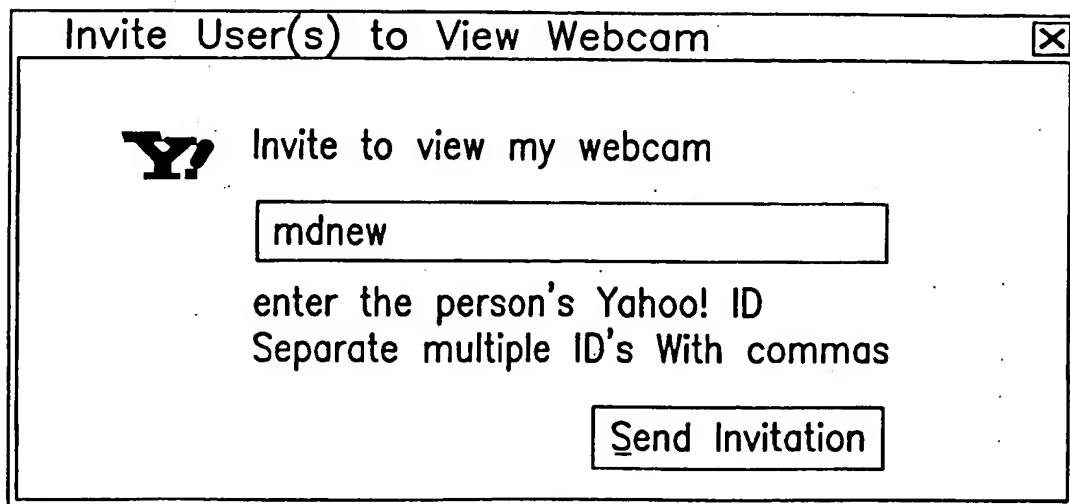


FIG.21

1900

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FIG.19

Yahoo! Messenger Preferences

Category

General

Content

Appearance

Messages

Alerts and Sounds

Chat

Webcam

Privacy

Connection

Webcam

Image quality

Camera Settings

Faster refresh

Better quality

Viewing Permissions

☒ Always ask my permission for someone to view my Webcam

☐ Allow everyone to view my Webcam

☐ Allow only the following people to view my Webcam

BobBarker

SuzyIdPerson

UserID1234

Edit

☐ If a user is not on my permission list ignore requests

☐ If I am in a chat room, allow those in the room to view my Webcam

☒ Change my status message to let my friends know when my Webcam is on

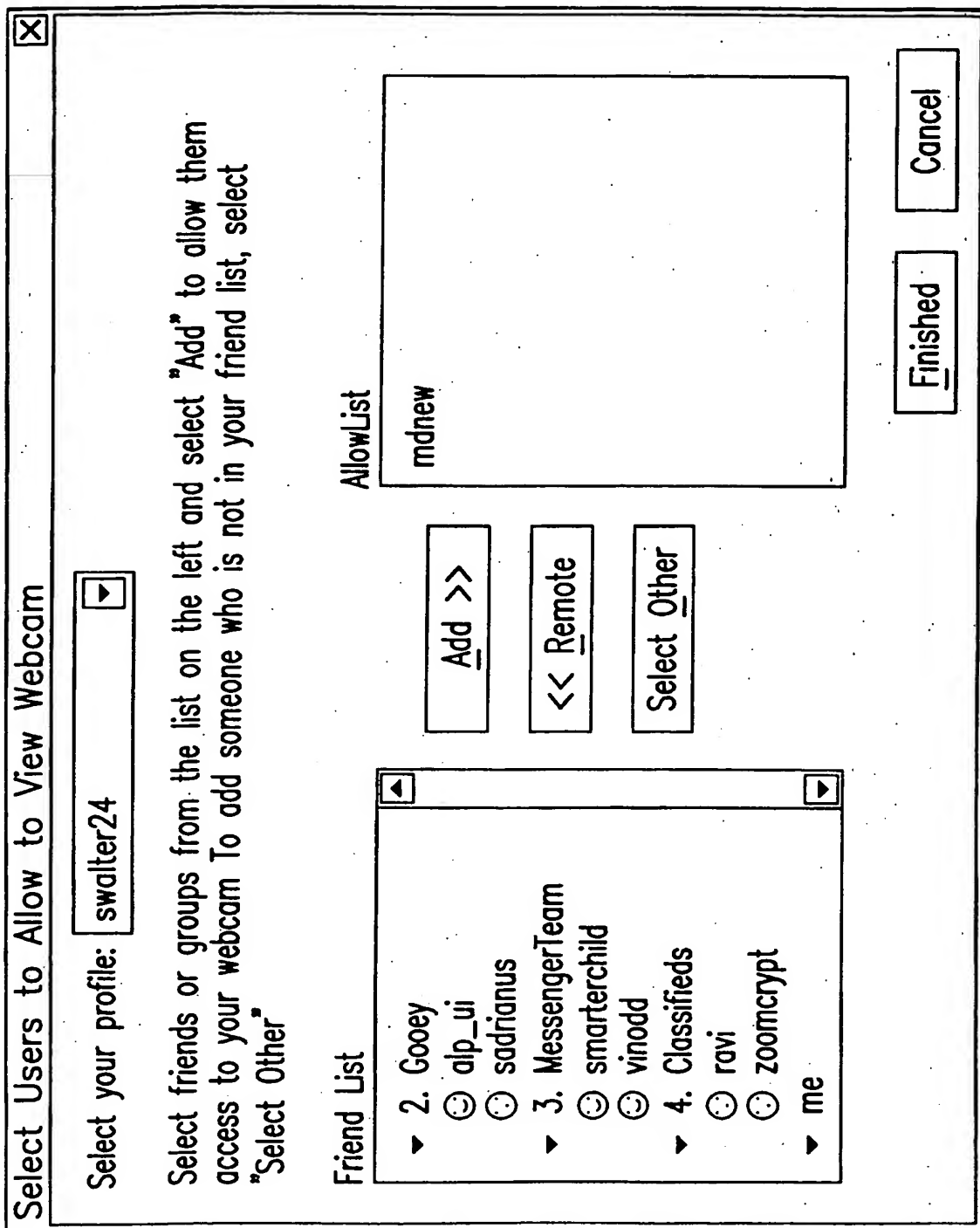
View My Webcam

OK

Cancel

Apply

Help



2000

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FIG.20

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2200

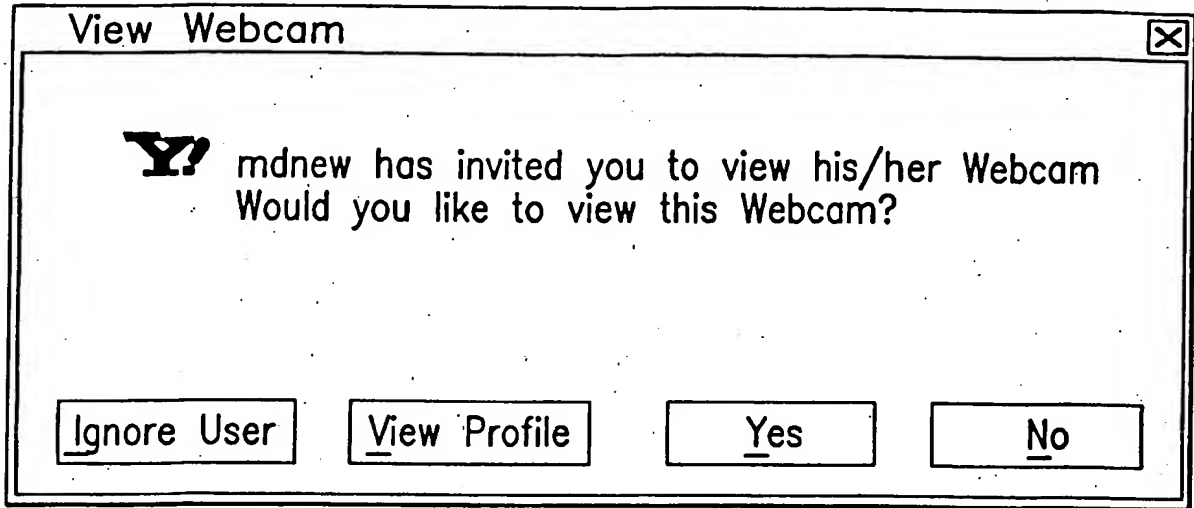


FIG. 22

2300

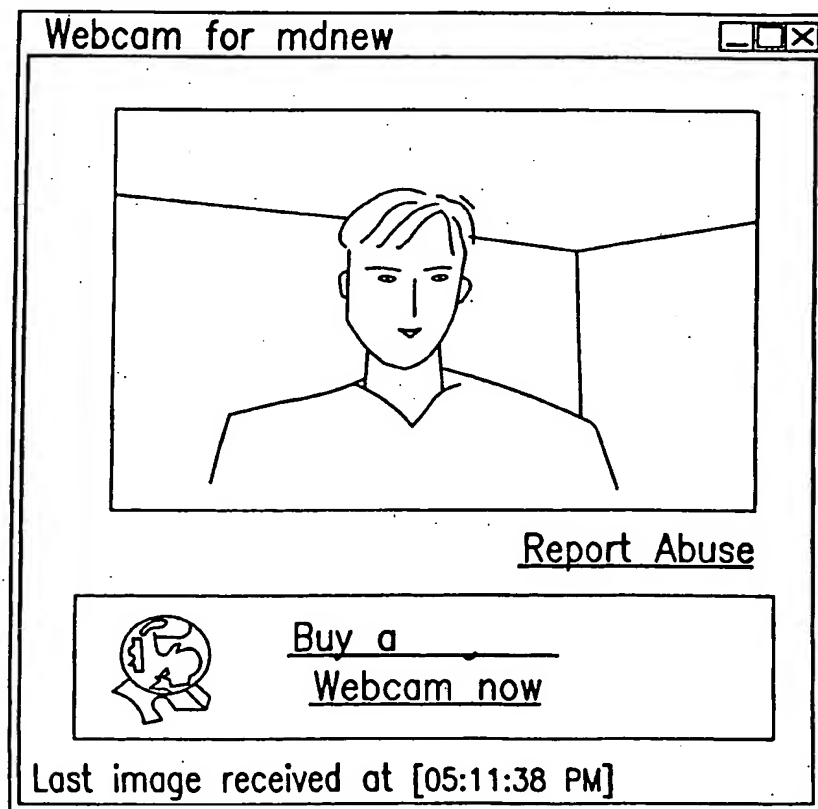


FIG. 23



FIG. 24

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2500

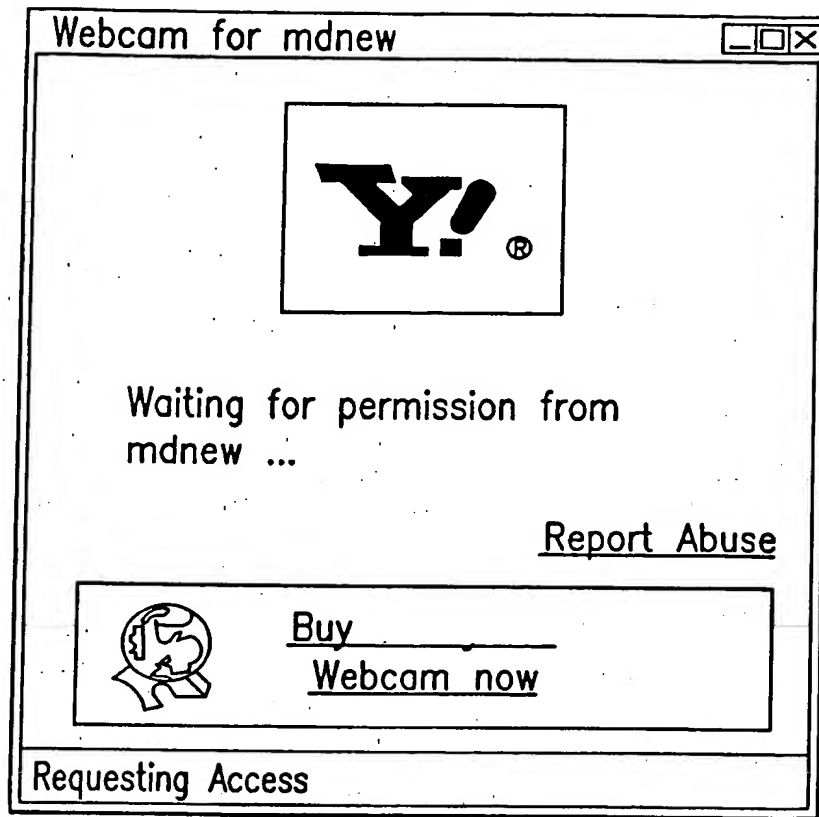


FIG.25

2600

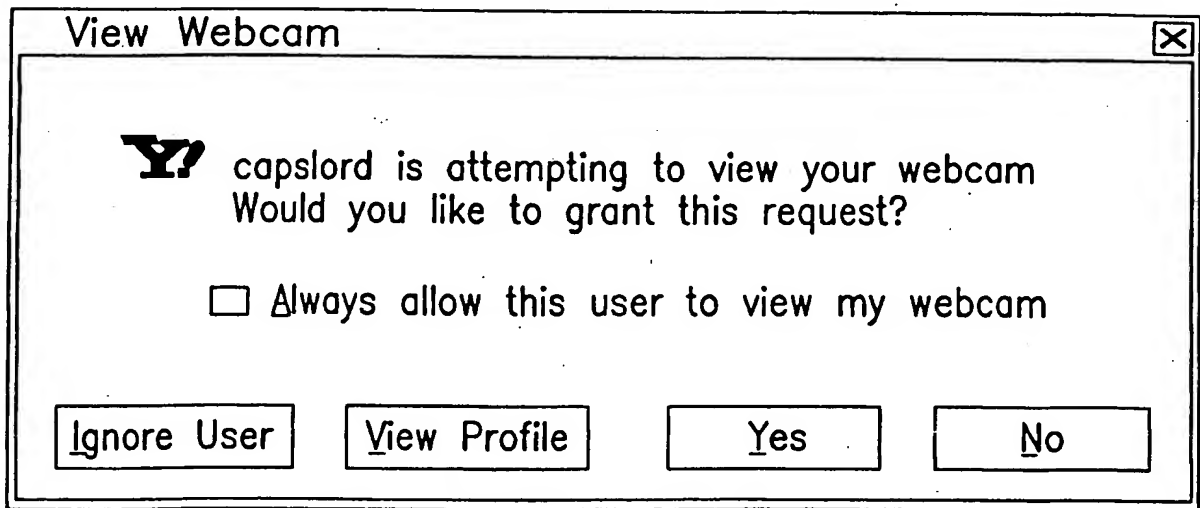


FIG.26